12. The method of claim **11**, wherein the tumor(s), tumor fragment(s), tumor cells or immortalized cells are colorectal tumor(s), tumor fragment(s), tumor cells or immortalized cells.

13. The method of claim **11** or **12**, wherein the tumor(s), tumor fragment(s), tumor cells or immortalized cells are present in a layer or compartment within the intestinal tissue model.

14. The method of any one of claims **11-13**, wherein the layer of intestinal epithelial cells and layer of interstitial tissue comprises primary epithelial cells from a healthy donor.

15. The intestinal tissue model of any one of claims **1-14** that exhibits at least one of the following:

(a) apical staining of villin;

(b) tight junctions;

(c) an apical brush border;

(d) villi-like structures on the epithelial surface;

(e) a basal lamina between the layer of interstitial tissue and layer of epithelial cells;

(f) secretes mucus;

(g) expresses CYP3A4;

(h) expresses p-glycoprotein;

(i) expresses glucagon-like peptide-1;

(j) expresses BCRP;

(k) contains enteroendocrine cells; and

(l) contains goblet cells.

16. The intestinal tissue model of any one of claims **1-15**, wherein the tissue model does not comprise fully mature, perfusable vasculature.

17. The intestinal tissue model of any one of claims **1-16**, wherein the tissue model does not comprise red blood cells.

18. The tissue model of any one of claims **1-17**, wherein the tissue model is not innervated by the central nervous system.

19. The intestinal tissue model of any one of claims **1-18**, wherein the layer of intestinal interstitial tissue comprising myofibroblasts and/or the layer of intestinal epithelial cells is substantially a monolayer.

20. The intestinal tissue model of any one of claims **1-19**, wherein the intestinal tissue model further comprises a biocompatible membrane in contact with the intestinal tissue layer.

21. The intestinal tissue model of any one of claims **1-20**, wherein the model is at least 2 cell layers thick.

22. The intestinal tissue model of any one of claims **1-21**, wherein a plurality of the intestinal tissue models are configured to form an array.

23. The intestinal tissue model of claim **22**, wherein the array is present in the wells of a microtiter plate.

24. The intestinal tissue model of any one of claims **1-23**, wherein the intestinal model is in culture subject to static culture conditions.

25. The intestinal tissue model of any one of claims **1-24**, wherein the intestinal model is in culture subject to non-static culture conditions.

26. The intestinal tissue model of any one of claims **1-25**, comprising at least one first region that comprises normal layers of intestinal interstitial tissue and intestinal epithelial cells and at least one second region that comprises layers of intestinal interstitial tissue and intestinal epithelial cells, wherein at least one of the layers of the second region comprises cells from a diseased donor.

27. A non-human animal model of an intestinal disorder or injury comprising a non-human animal implanted therein the intestinal tissue model of any one of claims **1-26**.

28. The non-human animal model of claim **27**, wherein the non-human animal is an immunodeficient rodent.

29. A method of assessing the ability of a candidate therapeutic agent to reverse, reduce, induce or prevent an intestinal disorder or injury, the method comprising:

(a) contacting the intestinal tissue model or the non-human animal model of any one of claims **1-28** with the candidate therapeutic agent, wherein the intestinal tissue model has a phenotype of an intestinal disorder or injury;

(b) determining the viability or functionality of the intestinal tissue cells; and

(c) assessing the ability of the candidate therapeutic agent to reverse, reduce, induce or prevent an intestinal disorder or injury based on the determined viability or functionality of the intestinal tissue cells compared to a control intestinal tissue model that has not been contacted with the candidate therapeutic agent.

30. The method of claim **29**, wherein the phenotype of an intestinal disorder or injury is induced by contacting the intestinal tissue model with a treatment, compound, or infectious agent that gives rise to the phenotype.

31. The method of claim **29**, wherein the phenotype of an intestinal disorder or injury is the presence of tumor(s), tumor fragment(s), tumor cells, or immortalized cells in the intestinal tissue model.

32. The method of claim **31**, wherein the ability of a candidate therapeutic agent to reverse, reduce, induce or prevent an intestinal disorder or injury is reduced tumor(s), tumor fragment(s), tumor cell, or immortalized cell invasion or metastasis.

33. A method of assessing the ability of a candidate therapeutic agent to reverse, reduce, induce or prevent an intestinal disorder or injury, the method comprising:

(a) contacting the intestinal tissue model or the non-human animal model of any one of claims **1-28** with the candidate therapeutic agent;

(b) determining the viability or functionality of the intestinal tissue cells; and

(c) assessing the ability of the candidate therapeutic agent to reverse, reduce, induce or prevent an intestinal disorder or injury based on the determined viability or functionality of the intestinal tissue cells compared to a control intestinal tissue model that has not been contacted with the candidate therapeutic agent.

34. The method of any one of claims **29-33**, wherein the epithelial cells and/or the myofibroblasts of the intestinal tissue model are obtained from a diseased donor.

35. The method of claim **34**, wherein the diseased donor has celiac disease, Crohn's disease, ulcerative colitis, irritable bowel syndrome, hemorrhoids, diverticulititis, inflammatory bowel disease, microscopic colitis, lymophocytic colitis, collagenous colitis, endocrine disorders, metabolic disorders, obesity, diabetes, dyslipidemia, intestinal cancer or colorectal cancer.

36. The method of any one of claims **29-34**, wherein the intestinal disorder or injury is inflammation.

37. The method of any one of claims **29-34**, wherein the intestinal disorder or injury is a physical injury and the